



ARMY SAFE
IS ARMY STRONG



Introduction to Occupational Safety and Health Administration (OSHA)

*Understanding Requirements,
Rights and Responsibilities*

References

- 29 Code of Federal Regulations (CFR) 1910, *General Industry Standards*
- AR 385-10, *The Army Safety Program*, 23 August 2007, 23 August 2007 RAR 001 2008/11/07
- <http://www.osha.gov>

Terminal Learning Objective

- **Action:** Explain how the Occupational Safety and Health Administration (OSHA) impacts the Department of the Army
- **Conditions:** During group discussions regarding OSHA's relevance to the Army.
- **Standard:** The explanations must include legal and regulatory provisions regarding safety and health programs in the Army.

Lesson Data

- Safety Requirements
- Risk Assessment
- Environmental Conditions
- Evaluation
 - Oral questions
 - Participation during class discussions

Overview

- OSHA Requirements and Army Regulations
- Subparts of 29 Code of Federal Regulation (CFR) 1910
- Safety and Health Programs

Creation of OSHA

- Agency of the U.S. Department of Labor
- Created by Congress
 - Under the Occupational Safety and Health Act (OSHAct) of 1970
 - Public Law 91-596



OSHA's Mission

Simply stated OSHA's Mission is to:

- Establish and enforce protective standards for workplace safety and health
- Assure the safety and health of all of America's working men and women
- Provide assistance to employers to reduce or eliminate workplace hazards

What does OSHA do?

- Encourages workplace hazard reduction
- Implements/improves safety and health programs
- Develops/enforces job safety and health standards
- Maintains a reporting and recordkeeping system
- Provides assistance, training, and other support

How does OSHA apply to the Army



Reference AR 385-10

Army Regulation 385-10

Safety

The Army Safety Program

AR 385-10, The Army Safety Program

AR 385-10 states that:

“It implements requirements of the Occupational Safety and Health Act of 1970 as implemented in EO 12196; 29 CFR 1960; DODI 6055.1; DODI 6055.4; and DODI 6055.7”

Page i – Summary [of the publication]

What is the Correlation?

Public Law 91-596

Executive Order 12196

29 Code of Fed. Regs.

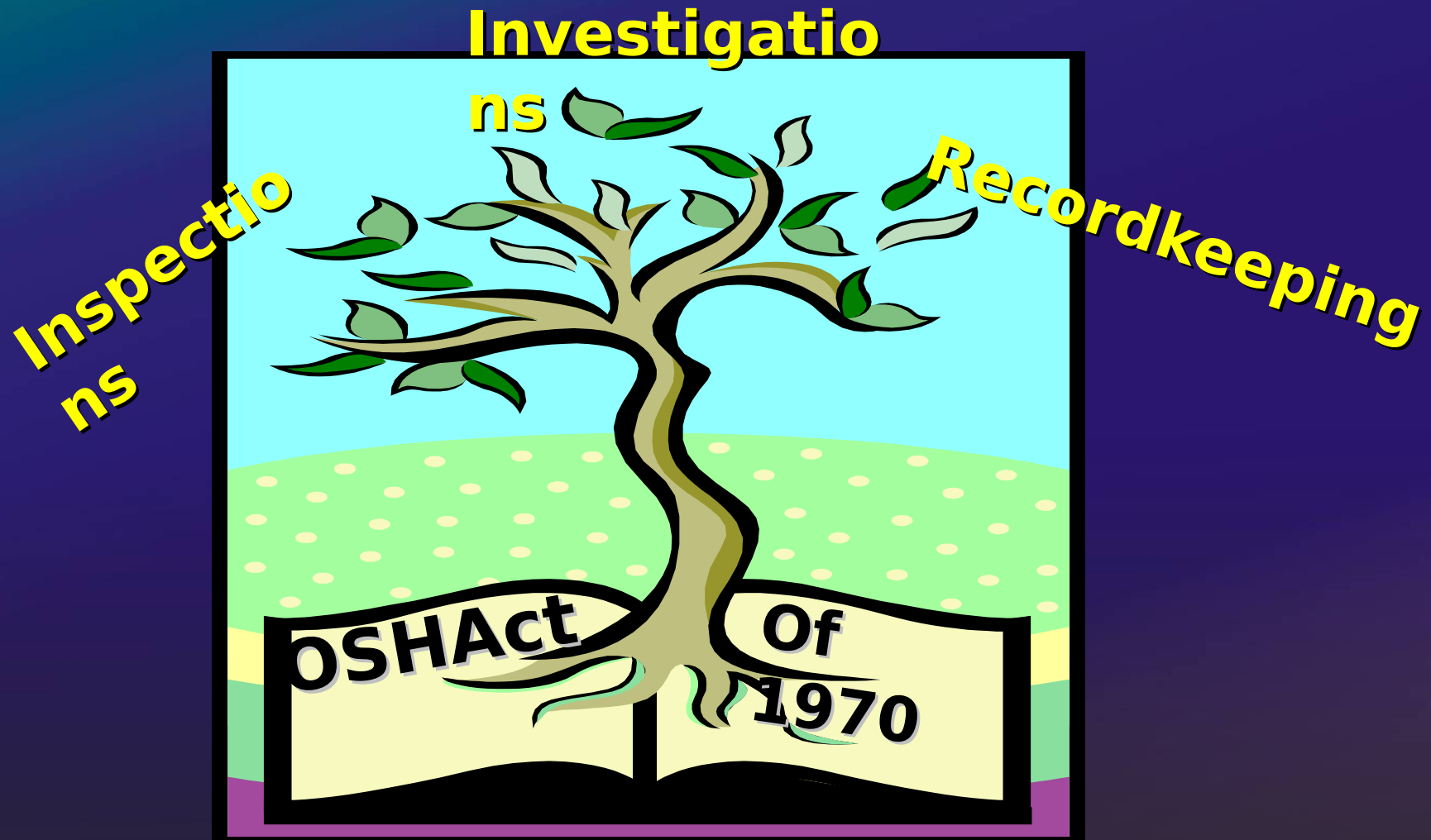
DODI 6055.1

AR 385-10

DA Pam 385-10

Army Safety Program

Roots of the Army Safety Programs



If there is a conflict between the OSHA standard and the Army standard...

USE THE STANDARD THAT PROVIDES THE MOST PROTECTION

OSHA Standards are minimum requirements

An employer can exceed the standard(s)

What does OSHA Require?

OSHA requires organizations to:

- a. Determine which OSHA standards apply to their workplace
- b. Follow the requirements of those standards

For example, many Army requirements are based on 29 CFR 1910, General Industry Regulations.

29 CFR 1910 Subparts

- | | |
|---|---------------------------------|
| A. General Provisions | K. Medical & First Aid |
| D. Walking-Working Surfaces | L. Fire Protection |
| E. Exit Routes... | M. Compressed Gas/Air |
| F. Powered Platforms... | N. Materials Handling & Storage |
| G. Occupational Health & Environmental Controls | O. Machinery & Guarding |
| H. Hazardous Materials | P. Hand Tools/Power Tools |
| I. Personal Protective Equipment | Q. Welding, Cutting, & Brazing |
| J. General Environmental Controls | R. Special Industries |
| | S. Electrical |
| | T. Commercial Diving Ops |
| | Z. Toxic & Hazardous Substances |

Subpart G: Occupational Health & Environmental Controls

- Provides requirements regarding exposure to workplace
 - Noise
 - Air contaminants
 - Radiation

Subpart G: Occupational Health & Environmental Controls

Continued

- Addresses requirements for
 - Occupational noise and hearing conservation program
 - Ventilation
 - Ionizing and non-ionizing radiation

Hearing Conservation Programs

- OSHA 1910.95, *Occupational Noise Exposure*
- AR 40-5, *Preventive Medicine*
- DA Pam 40-501, *Hearing Conservation Program*

Hearing Conservation Programs

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ed*

- Hearing loss is preventable through Hearing Conservation Program application and enforcement
- Commanders are required to enforce all aspects of the Hearing Conservation Program IAW AR 40-5, *Preventive Medicine*

Hearing Loss is Preventable!

- Conserving your hearing is important
- You never “get used to noise”
 - That means that you have already suffered a hearing loss



Noise Measuring Considerations

1. Frequency

- Measured in Hertz (HZ) or cycles per second (cps)
- High frequency sounds: most damaging and high frequency hearing loss is usually the first to occur

2. Intensity

- Measured in decibels (dB)
- 85dB - Injurious noise level

3. Duration - Length of time exposed to noise

Noise Measuring Considerations

Continued

- Impulse noise
 - Characterized by rapid build up to a high intensity followed by a rapid decay
 - Most detrimental to hearing
 - Example: Artillery or Mortar Fire

Air Contaminates

- 29 CFR 1910.134 and AR 11-34,

The Army Respiratory Protection Program, sets minimum acceptable requirements

- Respiratory protection is required when engineering controls are not feasible or while such controls are being installed



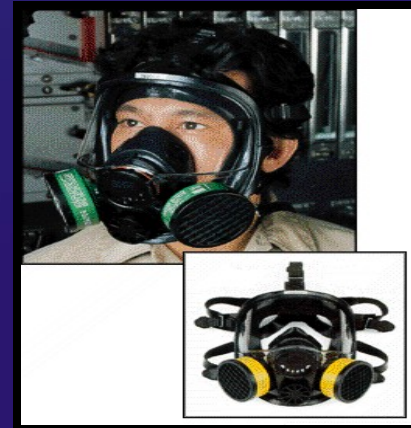
29 CFR 1910.134 Respiratory Protection

Respirator types – selected based on hazard

- Disposable Dust Respirators
- Air-Purifying Respirators
- Supplied-Air Respirators / Supplied-Air Hoods
- Self-Contained Breathing Apparatus (SCBA)

The Army Respiratory Protection Program

- Governs Army selection and use of respirators
 - User fitting and training
 - Maintenance, cleaning, and storage



Military Protective Mask

- Fitted to the individual
- Hands-on proficiency training
- Must be inspected and maintained
- Tested and approved
- Limitations:
 - Not approved for maintenance operations
 - No protection against oxygen deficiency/carbon monoxide



TM Pro Mask

Subpart K: Medical And First Aid

- Provides requirements concerning
 - First aid
 - Medical treatment
 - Flushing facilities
- Requires the employer to ensure the ready availability of medical personnel for advice and consultation on matters of health

Subpart L: Fire Prevention & Protection

- Provides requirements concerning flammable and combustible materials
- Gives requirements for:
 - Training personnel required to conduct firefighting
 - Portable fire extinguishers and fixed extinguishing systems

Army Fire Prevention & Protection

- Fire is one of the greatest accident threats to unit safety and mission capability






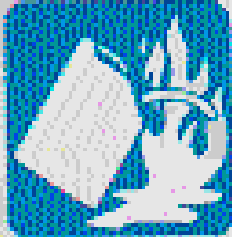

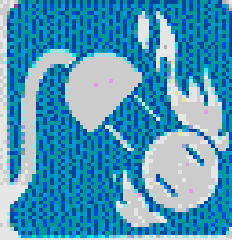

Fire prevention is critical!

Army Fire Prevention & Protection

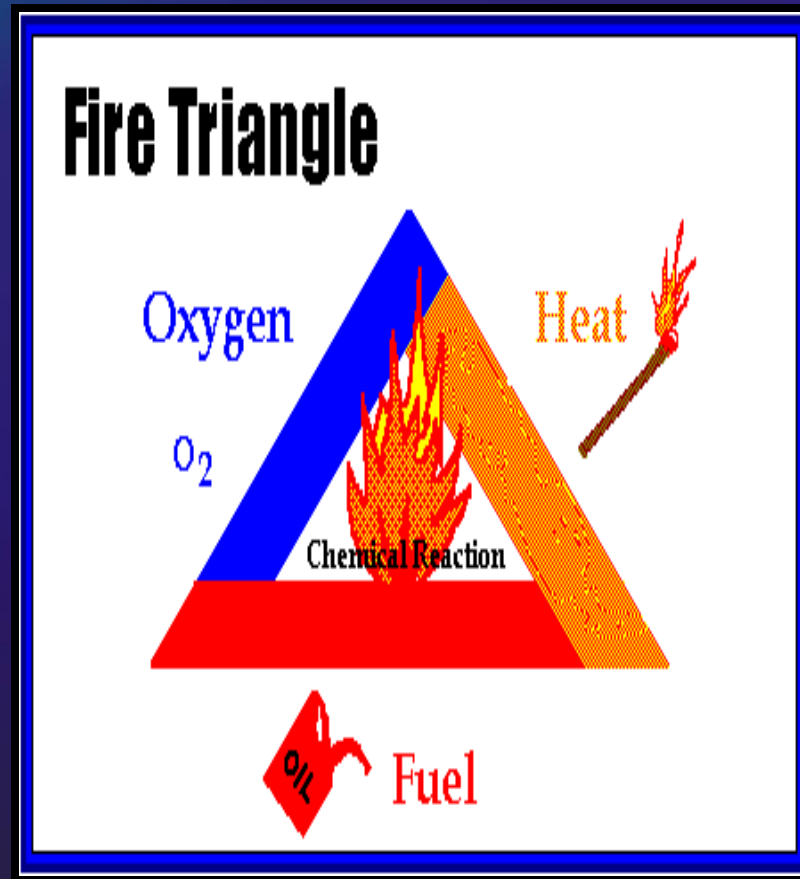
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- The Commander must establish and enforce an effective fire protection program
- The Army adopts the most current version of National Fire Protection Association (NFPA) standards

Fire Classifications

TYPES OF FIRES		
LETTER SYMBOL		PICTURE SYMBOL
	For wood, paper, cloth, trash and other ordinary materials.	
	For gasoline, grease, oil, paint and other flammable liquids.	
	For live electrical equipment.	
	For combustible metals.	No Current Symbol

Fire Prevention is keeping the three basic elements of a fire from coming together



Common Sources of Fires

- Hot surfaces
- Friction
- Smoking
- Cutting and welding
- Burner flames
- Mechanical sparks
- Static electricity
- Lightning



Subpart P: Hand & Portable Powered Tools

- Provides requirements concerning hazards from:
 - Electrical shock
 - Exposure to tool blades, bits, and moving parts
 - Guarding
 - Grounding (three prong plug)



Subpart Z: Toxic & Hazardous Substances

About 32 million workers are potentially exposed to one or more chemical hazards



Subpart Z: Toxic & Hazardous Substances

- Provides requirements concerning:
 - Exposure to toxic dust and vapors including respiratory hazards and skin contact
 - Listing of chemicals that are potentially hazardous to personnel
 - Maximum limits for daily exposure to chemicals to prevent injury or illness

Subpart Z: Toxic & Hazardous Substances

Continued

- Health Hazards
 - Chemical exposure can result in a variety of effects from mild irritation to disability and death
 - Effect can be immediate or result from prolonged, repeated exposure

Subpart Z: Toxic & Hazardous Substances

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ed*

- The effect on personnel depends on several factors:
 - Toxicity
 - Exposure
 - Dose
 - Response



Subpart Z: Toxic & Hazardous Substances

Continued

- Environmental Factors affect exposure
 - Ventilation
 - Temperature
 - Pressure
- Physiological Factors affect exposure
 - Age
 - Sex
 - General Health
 - Previous exposure
 - Tolerance

Subpart Z: Toxic & Hazardous Substances

Continued

- Physical hazards - Some chemicals may be safety hazards with the potential to cause fires, explosions and other serious accidents:
 - Flammable / Combustible
 - Compressed gases
 - Explosives
 - Oxidizers
 - Corrosives



Subpart Z: Toxic & Hazardous Substances

*Continu
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Elements of a Basic Unit Hazard Program

1. Prepare a written HAZCOM plan
2. Conduct a survey
3. Prepare a Hazmat Inventory
4. Develop MSDS Files
5. Provide access to MSDS files
6. Ensure incoming products have labels

Continued next

slide

Subpart Z: Toxic & Hazardous Substances

Continued

Elements of a Basic Unit Hazard Program

7. Develop a system for labeling
8. Develop a training plan
9. Identify and train all affected personnel
10. Evaluate, Improve, and Update as required
11. Meet specifications of Status of Forces Agreements

Would you drink one of these?



**Hydraulic
Fluid**

Gatorade
tm

Blood Borne Pathogens (BBPs)

- BBPs – microorganisms, (bacterial, parasitic, or viral), that are present in human blood and can cause disease in humans
- Standard applies to occupational exposures to blood or other potentially infectious materials (OPIM)
- Soldiers can be at risk



Blood Borne Pathogens (BBPs)

Continued

- Major Concerns
 - Hepatitis B (HBV) and C
 - Human Immunodeficiency Virus (HIV)
- Entry Routes (for blood or other infectious material)
 - Unprotected opening in the skin
 - Unprotected mucus membrane openings
 - Penetration of the skin

Precautions Against BBP

- Always wear proper personal protective equipment (PPE)
- Wash thoroughly even after removing gloves
- Control contaminated needles/sharps
- Practice good housekeeping

Employers' Responsibilities

- Follow the OSHA standards
- Must provide a safe and healthful workplace
- Provide
 - Training,
 - Medical exams
 - Recordkeeping
- Display OSHA Poster

DoD Safety and Occupational Health Protection Program Form (Poster)

- DD Form 2272
- Must be posted in all Army workplaces
- All personnel should review it
- Informs Army personnel of rights and responsibilities pertaining to safety

Supervisor's Responsibilities

- Analyze work
- Identify potential hazards
- Maintain physical protections in work areas
- Reinforce employee training

Workers' Responsibilities

- Read the OSHA poster
- Follow the employer's safety and health rules
- Wear or use all required personal protective equipment (PPE), gear, and equipment
- Follow safe work practices
- Report hazardous conditions
- Cooperate with OSHA inspectors

Army Employee Hazard Reporting

- Personnel are encouraged to report hazards through their chain of command
 - They may report hazards directly to the installation safety and health official
 - Reported using DA Form 4754, *Employee Report of Alleged Unsafe or Unhealthful Working Conditions*

VIOLATION INVENTORY LOG								
For use of this form, see AR 385-10; the proponent agency is ODCSOPS								
LOG OF SCHEDULE OF CORRECTIVE ACTION-COMPLIANCE WITH SAFETY AND HEALTH STANDARDS								
NAME OF INSTALLATION		Fort Retirement, Bldg# 4905						
ITEM	LOCATION OF INCONSISTENCY ^{1/} <i>a</i>	OSHA REFERENCE		INCONSISTENCY <i>d</i>	CORRECTIVE ACTION <i>e</i>	TARGET DATE FOR CORRECTIVE ACTION <i>f</i>	DEGREE OF DANGER ^{3/} <i>g</i>	ESTIMATED COST <i>h</i>
		TITLE/PART <i>b</i>	SUB-PART ^{2/} <i>c</i>					
1.	Motor pool Bldg 4905	N/A	N/A	Tire cage bolted to floor	Remove bolts	06 June 01	RAC 3	N/A
2.	Motor pool Bldg 4905	CFR 1910.94	(d)(9)(v)	No PPE present at solvent Tank	Provide Appropriate PPE	06 June 01	RAC 1	\$30.00 (GSA)
3.	3 rd PLT office Room 104 Bldg 4905	CFR 1910.253	(b)(2)(ii)	Propane cylinders stored in unauthorized area	Utilize authorized storage areas only	06 June 01	RAC 4	N/A
NOTES: 1/ Such as "CarpenterShop and/or Building Number." 2/ Include paragraph number in another code if further referenced. 3/ Use Roman numerals (Category I - Imminent danger, Category II - Serious hazard, Category III - Moderate hazard, Category IV - De minimus hazard)								

Workers' Rights

- Work with employers to identify and correct problems
- File complaints with OSHA
- Seek safe and healthful conditions without being disciplined or fired

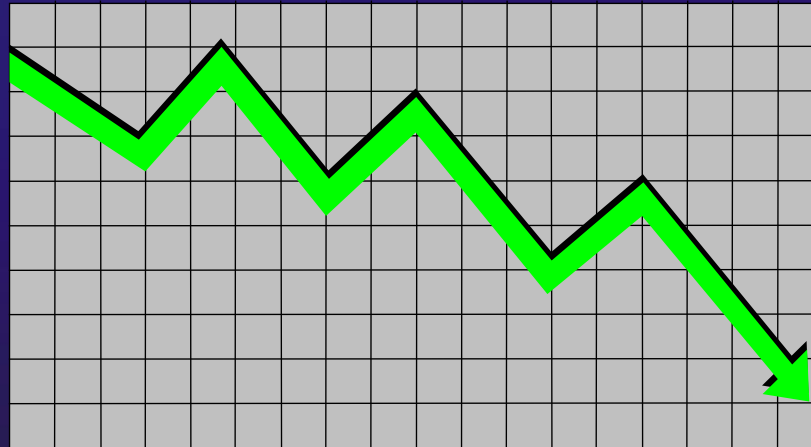


Safety and Health Programs



Benefits of Effective Safety & Health Programs

- Reduce work related injuries and illnesses
- Improve morale and productivity
- Reduce costs
 - Direct
 - Indirect



Program Responsibility

- Responsibility requires authority and resources
- Accountability at all levels
- Program operations must be reviewed at least annually
 - Evaluate Program
 - Identify deficiencies
 - Revise, as needed

Major Elements of an Effective Program

1. Management commitment
2. Employee involvement
3. Worksite analysis
4. Hazard prevention and control
5. Safety and health training



Management Commitment

- Committed management provides:
 - Motivation and resources
 - Clearly stated worksite safety and health policies
 - Clear goals and objectives
- Involves top management

5 Elements of an Effective Safety Program



Employee Involvement

- Allows workers to develop and express commitment to safety and health
 - Employees must commit to safety and health protection for themselves and fellow workers

5 Elements of an Effective Safety Program

Management Commitment and Employee Involvement

- One is not effective without the other
- Both are necessary for successful programs





Worksite Analysis

- Management must
 - Anticipate and prevent harmful occurrences
 - Actively analyze the work and the worksite to identify:
 - Existing hazards
 - Changes that might occur to create hazards

5 Elements of an Effective Safety Program

Comprehensive Baseline Survey

- Job Hazard Analysis
 - Identifying existing or potential job hazards
 - Determining the best way to reduce or eliminate hazards
- Industrial hygiene survey
 - Inventory all chemicals and hazardous materials

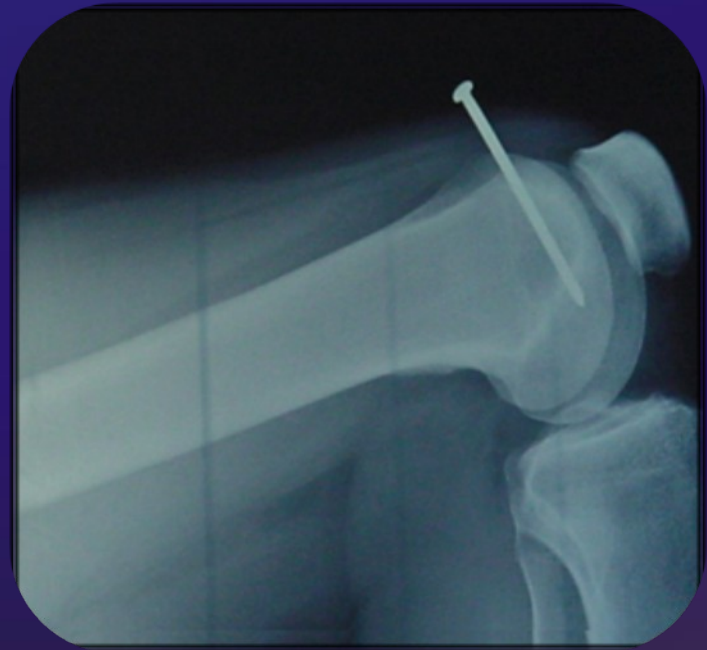
Safety and Health Inspections

- Open communication for hazard identification
- Conduct regular site inspections
- Establish daily work area inspection procedures
- Develop and use a checklist



Additional Worksite Analysis

- Investigate accidents and near misses
- Analyze injury and illness trends



*Nail Gun
Incident*

Workplace Inspections

- Every establishment covered by the OSHA Act is subject to inspection
- Most inspections are conducted without advance notice



After an OSHA Inspection

- OSHA may or may not issue citations
- Citations inform employer and employees of
 - Regulations/standards violated
 - Proposed time for abatement
- Employer must post a copy of each citation



Hazard Prevention and Control

- Identify hazards and potential hazards
- Prevent hazards where feasible
- Control hazards that can't be eliminated
- Eliminate or control hazards in a timely manner

5 Elements of an Effective Safety Program

Controlling the Hazards

- Engineering controls
- Administrative controls
- Personal protective equipment
- Communicate safe work practices
 - Training
 - Positive reinforcement
 - Correct unsafe performance
 - Enforcement



Hazard Prevention Planning

- Maintain facilities and equipment
- Emergency planning
 - Training and drills, as needed
- Medical program
 - First aid on site
 - Physician and emergency care nearby



Safety and Health Training

- Everyone needs training
 - Policies and procedures
 - Safety and health responsibilities
 - Emergency response
- Periodic refresher training



5 Elements of an Effective Safety Program

Safety and Health Orientation

- Employees must be introduced to:
 - Existing hazards
 - Protection measures and equipment
 - Hazard identification



Specific Training Needs

- Hazard detection and control
- Job specific safety training
- Emergency planning and drills
- Accident investigation



Introduction to OSHA – What are your questions or comments?



Check on Learning

Q: Why was OSHA created?

A: The *Occupational Safety and Health Act of 1970* (PL 91-596) created the Occupational Safety and Health Administration to help employers and employees reduce injuries, illnesses and deaths on the job in America.

Check on Learning

Q: Which Army Regulation implements the OSH Act within the US Army?

A: AR 385-10

Check on Learning

Q: What happens when Army publications conflict with OSHA standards?

A: Use the standard that provides the most protection

Check on Learning

Q: At what noise intensity level is a hearing conservation program required?

A: 85 db and higher

Check on Learning

Q: What form should be used to report a workplace hazard?

A: DA Form 4754, *Employee Report of Alleged Unsafe or Unhealthful Working Conditions*

Check on Learning

Q: What are the five elements of an effective safety program?

A: Management commitment
Employee involvement
Worksite analysis
Hazard prevention and control
Safety and health
training

Summary

- OSHA Requirements and Army Regulations
 - OSHA 's mission
 - Application of OSHA to the Army
- Subparts of 29 Code of Federal Regulation (CFR) 1910
 - Subparts G, K, L, P, and Z
- Safety and Health Programs
 - Five majors elements

Conclusion

- If you desire, or require, additional OSHA training, contact your Brigade or Installation Safety Office. They should have an OSHA General Industry Trainer who can conduct the 10 hour or 30 hour OSHA Outreach.